DRYDEN AIRBORNE SCIENCE INVESTIGATOR QUESTIONNAIRE

1. **Mission / Program**: _____.
2. **Instrument: _____.**
3. **Principal Investigator:**

   Name:

   Citizenship**:

   Address:

   Phone:

   Fax:

   Email:

Other team members:

NAME	ORGANIZATION	CITIZENSHIP **	ROLE	AT DRYDEN	AT DEPLOYED SITE
(Example) John Doe	John Doe Center	U.S.	Mechanic/Operator		√

Add an (*) to those names that will be part of the flight crew for the DC-8, and number of operators for Missions and Ferry flights.

**If any individual on the team is not a US Citizen and or they do not possess a valid Green Card, they must complete the following form “Export and Security Documentation for Foreign National (FN) Visit(s).

EXPORT AND SECURITY DOCUMENTATION
FOR
FOREIGN NATIONAL (FN) VISIT(S)

Definitions:

"Foreign national" means any person who is not a citizen or permanent resident alien of the United States (See 22 CFR Section 120.16).

"Representative of a foreign entity" or **"foreign representative"** means any person, including a citizen, permanent resident alien or protected individual of the United States, who seeks to visit a NASA Center for the purpose of representing a government, business, organization, or person of a country other than the United States.

Information required for foreign nationals: If any of the people will be involved in the assembly or operation (i.e., will be requesting to work at Dryden or to be on or near any NASA aircraft) of your experiment are foreign nationals, then you are required to fill out the attached "Request for Information on Foreign National Personnel" and return it as soon as possible to _____.

Please complete all information requested and provide copies of the required documents. Time is of the essence in this matter. For requested visits of 30 days or less in duration, the information should be received by us no later than four (4) weeks in advance of the visit. For requested visits in excess of 30 days, the information should be received by us no later than eight (8) weeks in advance of the visit. Requests for visits of any duration by foreign nationals from a designated country (see Attachment A hereto) information should be received by us no later than eight (8) weeks in advance of the visit. Individuals who are holders of valid "green cards" will be considered on the same basis as other "U.S. persons". Failure to receive the request in a timely or complete manner (will normally) could result in denial of the request.

NOTE: This form will be completed by the Principal Investigator

1. Foreign National Name(s) (list additional names below)

2. Passport/Current Visa Type/Expiration: (Provide a copy with Foreign Visit Request 735B)

3. Citizenship: (FN may have more than one)

4. **Affiliation:** Examples – Universities, Private Companies. What is the context of Dryden's involvement? What is the business relationship: Contract/Grant/Interagency Project, SBIR, etc. #_____ (Provide copy).

   (An "agreed international program or project" is one which has been established pursuant to an appropriately signed agreement between NASA Headquarters and a foreign agency or organization, international organization, or a U.S. based organization with international membership). **NOTE: Visitors from JPL must be cleared with the JPL International Affairs Office.**

5. Provide a brief description of the foreign national responsibilities and duties on the project and a description of any sensitive materials technology or information they will have access to (attachments may be included, if necessary).

6. Point of contact (i.e., Project Manager/Operations Manager/Technical Monitor/Mission Manager/Principal Investigator)

7. Complete NASA Form 531, Name Check Request. Do not complete if visitor is cleared from another NASA Center. Identify NASA Center.

8. Approved_____ Date_____
Please Print and Sign Name

I. **HAZARDOUS MATERIALS / EQUIPMENT** (List information for each item for aircraft and/or ground use)

1. Lasers

Laser type:

Laser class:

Laser wavelength:

Output power/energy:

Output power/energy pulse width:

Output power/energy repetition rate:

Shielding requirements:

2. Radio Frequency Emitters

Description:

RF power:

Frequency range:

Operational constraints:

Installation constraints:

3. Compressed Gasses

Gas description (mixture / concentration):

Cylinder internal volume:

Cylinder pressure:

Number of cylinders required on DC-8:

Preferred location on DC-8:

How often changed:

Comments:

4. **Chemicals** (solids and liquids)

    Description (name, concentration):

    Total quantity on DC-8:

    Container description:

    Purpose:

5. **Radioactive Materials**

    Source:

    Half-life:

    Quantity:

6. **Cryogens**

    Material description:

    Container description:

    Quantity required on flight days:

    Operational constraints:

    Installation constraints:

7. **Batteries/Uninterrupted Power Supply (UPS)**

    Battery and UPS description (manufacturer name and model number)

    Battery type:

8. **Pressure Vessels**

    Description (purpose, contents):

    Internal volume:

    Vessel pressure:

    Installation constraints:

9. **Motors/Pumps**

    Description:

    Manufacturer name / model number:

    Motor type (capacitor start, brush-less, explosion proof):

10.Heaters

Description (system components, location):

Manufacturer name / model number:

Maximum temperatures:

11.Power Distribution Equipment (non-DC-8 outlets, power converters)

Description:

Manufacturer name / model number:

APPENDIX A

I. DC-8 INSTALLATION

1. Seats and Operators

Total number of seats required during DFRC experimenter check out flights:

Total number of seats required during transit flights:

Total number of seats required during science flights:

Preferred location of seats:

2. Racks and Floor Mounted Equipment

Number and type of racks required on DC-8:

Preferred location of racks:

Number and type of racks required to be shipped to P.I. lab:

Shipping address and phone number:

Required shipping date:

Name and size of floor mounted equipment (besides racks):

Preferred location of floor mounted equipment:

Special installation constraints:

3. Storage Boxes

Provide estimate of storage volume and weight for transport on the DC-8:

In-flight access requirements for boxes:

Number of overhead bins requested (3 cubic feet each):

Special installation constraints:

4. Probes, Sensors, Antenna, View ports, Etc.

NASA design support required:

NASA fabrication support required:

Has this instrument flown on the DC-8 before (provide mission name and date)?

Have there been any changes since last flown?

Were any discrepancies noted at the last installation?

Were all noted discrepancies resolved?

a. Probes

Description:

NASA part number (if any):

Current location and ownership of probe:

Preferred location on DC-8:

Sampling direction (forward or aft):

Probe alignment (with aircraft or with free stream):

Equipment to be installed with probe:

Maximum allowable distance from rack:

Special installation constraints:

b. Optical Windows

Optical window size:

NASA serial number (if any):

Current location and ownership of window:

Preferred location on DC-8:

Optical pass-band:

Preferred material and coating:

Window cleaning requirements:

Special installation constraints:

c. Exhaust Port(s)

Description:

Current location and ownership of exhaust port:

Preferred location on DC-8:

Contents of exhaust:

Special installation constraints:

d. Antenna(s)

Description:

Antenna size:

Current location and ownership of antenna:

Preferred location on DC-8:

Antenna orientation:

RF power:

RF frequency:

Special installation constraints:

e. Equipment Covering/Shields

Description:

Operational requirements:

Special installation constraints:

f. Special Equipment

List any other equipment required:

5. Aircraft Power Requirements

a. 115V, 60 hz single phase

Power (watts):

Load name:

Start current:

Run current:

Regulation:

Comments:

b. 115v, 400 hz three phase:

Power (watts):

Load name:

Start current:

Run current:

Regulation:

Comments:

c. Other Electrical Requirements:

Power (volts, watts):

Load name:

Start current:

Run current:

Regulation:

Comments:

6. Data Acquisition and Distribution System Requirements (DADS)

DADS parameters desired:

Do you want to record data from the DADS stream?

Do you want to view aircraft and DADS video display?

Do you need a DC-8 supplied video monitor for DADS display?

Preferred video monitor location:

Do you want to display data through the DADS display?

Post flight data products desired:

Aircraft video products desired:

II. OPERATIONS (state desired, acceptable, unacceptable)

1. Aircraft Interior Environmental Conditions (where applicable)

Required temperature range:

Desired temperature range:

Desired humidity range:

Undesired flight conditions:

Desired maximum vibration:

Desired altitude range:

Environment critical components:

2. Aircraft Access

Pre-flight time required at aircraft:

In-flight warm-up time required:

Post-flight power/button-up time required:

No-fly-day time required at aircraft:

Ground support equipment required:

3. Aircraft Maneuvers

Describe in-flight calibration maneuvers:

Describe desired flight attitudes:

Pitch and roll limits:

Describe desired airspeed/mach regime:

Describe required flight altitudes:

Describe airspeed/mach limitations:

Undesired flight conditions:

4. Work Area Requirements (ground facilities)

Space requirements (square feet):

Tables/chairs:

Fume hood:

Exhaust:

Power:

Network connections:

Phones:

FAX:

Chemical storage:

Water:

Refrigeration:

Gases:

Special needs (i.e. laser curtain, location relative to other experimenters, carts):

Other:

5. DFRC Storage and Shipping (All lab space must be clean and available for use when not occupied)

What will require storage (i.e., empty boxes, electrical equip, chemicals)?

Amount of storage space required:

Do you need shipping and receiving assistance for Instrument and Equipment to Dryden, from Dryden, or while deployed?

APPENDIX B

I. ER-2 INSTALLATION

1. Payload (duplicate for each instrument)

Instrument:

Location:

Weight:

Power:

Other (antenna, exhaust ports, etc.):

Has this instrument flown on an ER-2 before (provide mission name and date)?

Have there been any changes since last flown?

a. Engineering Requirements (duplicate for each instrument)

Design:

Fabrication:

Installation:

Other (same as used on prior mission or modified, etc.):

II. OPERATIONS (state desired, acceptable, unacceptable)

1. Aircraft Interior Environmental Conditions (where applicable)

Required temperature range:

Desired temperature range:

Desired humidity range:

Undesired flight conditions:

Desired maximum vibration:

Desired altitude range:

Environment critical components:

2. Aircraft Access

Pre-flight time required at aircraft:

In-flight warm-up time required:

Post-flight power/button-up time required:

No-fly-day time required at aircraft:

Ground support equipment required:

3. Aircraft Maneuvers

Describe in-flight calibration maneuvers:

Describe desired flight attitudes:

Pitch and roll limits:

Describe desired airspeed/mach regime:

Describe required flight altitudes:

Describe airspeed/mach limitations:

Undesired flight conditions:

4. Work Area Requirements (ground facilities)

Space requirements (square ft):

Tables/chairs:

Fume hood:

Exhaust:

Power:

Network connections:

Phones:

FAX:

Chemical storage:

Water:

Refrigeration:

Gases:

Special needs (i.e. laser curtain, location relative to other experimenters, carts):

Other:

5. DFRC Storage and Shipping (All lab space must be clean and available for use when not occupied)

What will require storage (i.e., empty boxes, electrical equip, chemicals)?

Amount of storage space required:

Do you need shipping and receiving assistance for instrument and equipment to Dryden, from Dryden, or while deployed?